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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/815,616	03/23/2001	Krishna Kummamuru	JP920000447US1	5998

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EXAMINER

RIMELL, SAMUEL G

ART UNIT	PAPER NUMBER
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2175

DATE MAILED: 11/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/815,616

Applicant(s)

KUMMAMURU ET AL.

Examiner

Sam Rimell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-66 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.


SAM RIMELL
PRIMARY EXAMINER

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35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-66 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility.

Claims 1-66: MPEP 2106, Section IIA, makes the following requirements for utility of claimed inventions under 35 USC 101:

“The claimed invention as a whole must accomplish a practical application. That is, it must produce a useful, concrete and tangible result”. *State Street* 149 F.3d at 1373, 47 USPQ2d at 1601-02.

“A process that consists solely of the manipulation of an abstract idea is not concrete or tangible. See *In re Warmerdam* 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994). See also *Schrader* 22F.3d at 295, 30 USPQ2d at 1459.”

In reviewing claims 1-66, examiner finds that the claimed invention involves the manipulation of an abstract idea (the manipulation of data points) but does not claim any result from this manipulation which is useful, concrete or tangible. For example; claims 1, 23 and 45 are addressed to a method, system and computer programming for clustering data points. While it is agreed that the claimed invention does produce the result of clustering data, the mere clustering of data has no useful, concrete or tangible result. The clustered data is not being used for anything. Even claims such as claims 15, 17 and 21, which do indirectly suggest at some tangible result (text summarization, product catalogues and customer segmentation) do not meet the requirements of 35 USC 101 because these “tangible results” are not positively recited as being actual method steps or programming steps being carried out.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 14-27, 36-49 and 58-66 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakao et al. (U.S. Patent 6,141,443).

Claim 1: FIG. 41 illustrates a set of alphabetical characters, such as “R”, “i”, “h” and “o”. Now referring to table 43, a set of five data clusters (five clusters in each row) are arranged and compared in similarity to each character. For example, the letter “R” is compared for similarity to five data clusters. These five clusters are “R”, “P”, “F”, “p” and “n”. Each of the five data clusters for each character is assigned a lead value, which is its similarity number. For example, the lead value for the data cluster “R” is “21”. As seen by each row of FIG. 43, the lead values are arranged in descending order. The first lead value in each row is the “leader”, since it has the highest value. For example, the highest lead value in the first row is “21”, and it is thus the leader for that row. In each row of FIG. 43, each of the subsequent values after the lead value “21” can be considered leaders of separate clusters, since their values are less than a “threshold value” such as the maximum value of “21”. Thus, the values “18”, “17”, “15” and “14” in the first row can be considered as leaders of separate clusters, since they are less than the threshold value of “21”.

Claim 2: By applicant’s definition in the specification at page 1, second paragraph, all data relationships are either symmetric or asymmetric. Since claim 2 allows for both, claim 2

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essentially covers all data relationships. Thus, any data relationship defined in Nakao et al. reads on the limitations of claim 2.

Claim 3: Each lead value in FIG. 43 is partially determined by using an average (col. 32, line 13). An average value, by definition, involves a summation of values.

Claim 4: Since applicant does not define how the threshold value is determined, any value can be defined as a threshold value, such as the lead values given in each row in FIG. 43. Each lead value is adaptively determined by performing a calculation (col. 32, lines 10-22).

Claim 5: In FIG. 43, each row of data can also be considered as a cluster of data. Each row can thus be described as subclustered into five columns.

Claim 14: Claim 14 lacks any positive recitation of method steps and is directed to a discussion of what the data is supposed to represent, rather than what steps are being taken to manipulate the data. Accordingly, the recitations in claim 14 lack patentable weight.

Claim 15: Each column of Fig. 43 provides a text summarization.

Claim 16: Col. 32, line 14 calls the usage of a dictionary. Each column in FIG. 43 provides organized vocabulary. No patentable weight is attributed to the intended usage of customer profiling, since no customer profiling steps are actually recited.

Claim 17: Claim 17 is directed entirely to a description of what the data points are intended to represent, not specific steps that further define the process which is taking place. Accordingly, the recitations in claim 17 carry no patentable weight.

Claim 18: Claim 18 is directed entirely to a discussion of what the data is supposed to represent, not specific process steps. Accordingly, the recitations in claim 18 carry no patentable weight.

Claim 19: Claim 19 is directed entirely to intended applications of the method, rather than actual process steps which are carried out. Accordingly, these are attributed no patentable weight. See MPEP 2106, Section C (“Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or a claim limitation”).

Claim 20: Claim 20 is directed to an intended application of the method, rather than actual process steps which are carried out. Accordingly, these are attributed no patentable weight. See remarks regarding MPEP 2106, Section C as set forth in claim 19.

Claim 21: Claim 21 is directed to an intended application of the method (customer segmentation) rather than actual method steps being carried out. Claim 21 is further directed to descriptions of what the data is intended to represent, rather than actual method steps reciting how the data is manipulated. Accordingly, the recitations of claim 21 carry no patentable weight.

Claim 22: Claim 22 is directed to what the data is intended to represent, rather than actual method steps being carried out. Accordingly, the recitations of claim 22 carry no patentable weight.

Claim 23: See remarks for claim 1.

Claim 24: See remarks for claim 2.

Claim 25: See remarks for claim 3.

Claim 26: See remarks for claim 4.

Claim 27: See remarks for claim 5.

Claim 36: See remarks for claim 14.

Claim 37: See remarks for claim 15.

Claim 38: See remarks for claim 16.

Claim 39: See remarks for claim 17.

Claim 40: See remarks for claim 18.

Claim 41: See remarks for claim 19.

Claim 42: See remarks for claim 20.

Claim 43: See remarks for claim 21.

Claim 44: See remarks for claim 22.

Claim 45: See remarks for claim 1.

Claim 46: See remarks for claim 2.

Claim 47: See remarks for claim 3.

Claim 48: See remarks for claim 4.

Claim 49: See remarks for claim 5.

Claim 58: See remarks for claim 14.

Claim 59: See remarks for claim 15.

Claim 60: See remarks for claim 16.

Claim 61: See remarks for claim 17.

Claim 62: See remarks for claim 18.

Claim 63: See remarks for claim 19.

Claim 64: See remarks for claim 20.

Claim 65: See remarks for claim 21.

Claim 66: See remarks for claim 22.

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Any inquiry concerning this communication should be directed to Sam Rimell at telephone number (703) 306-5626.

A handwritten signature in black ink, appearing to read 'S. Rimell', written in a cursive style.

Sam Rimell
Primary Examiner
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